Integración Por Partes

Resolver las siguientes integrales aplicando la técnica de integración por partes:

1.
$$\int xe^x dx$$

$$2. \int \frac{x}{e^x} dx$$

$$3. \int x2^{-x}dx$$

4.
$$\int x \operatorname{sen}(x) dx$$

5.
$$\int t \cos(t) dt$$

6.
$$\int xe^{2x}dx$$

$$7. \int \frac{x^2}{e^{3x}} dx$$

8.
$$\int x^2 3^x dx$$

9.
$$\int x^2 \operatorname{sen}(x) dx$$

10.
$$\int t^3 \sin(t) dt$$

11.
$$\int \ln(x) dx$$

12.
$$\int \arctan(x)dx$$

13.
$$\int \arcsin(x) dx$$

14.
$$\int 4x \ln(2x) dx$$

15.
$$\int \sqrt{x} \ln(x) dx$$

16.
$$\int x \arctan(x) dx$$

17.
$$\int x \arcsin(x) dx$$

$$18. \int x^3 e^{x^2} dx$$

19.
$$\int \cos^2(x) dx$$

20.
$$\int \theta \cos(3\theta) d\theta$$

$$21. \int x^5 \cos(x^3) dx$$

22.
$$\int (t^2 + 5t + 6)\cos(2t)dt$$

23.
$$\int \sec^3(\theta) d\theta$$

24.
$$\int e^x \operatorname{sen}(x) dx$$

25.
$$\int \operatorname{sen}(3x)\cos(5x)dx$$

26.
$$\int x \operatorname{sen}(x) \cos(x) dx$$